EXHIBIT 16

OVERCHARGED:

STATE EMPLOYEES, CANCER DRUGS, AND THE 340B DRUG PRICING PROGRAM

North Carolina State Health Plan
FOR TEACHERS AND STATE EMPLOYEES
A Division of the Department of State Treasurer

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State Treasurer of North Carolina

Executive Summary

North Carolina hospitals used the safety-net 340B Drug Pricing Program to overcharge cancer patients, state employees, and taxpayers for oncology drugs. Although the 340B program was intended to subsidize care for impoverished patients, some hospitals pursued higher profits by expanding into wealthier neighborhoods with higher rates of health insurance.

The 340B Drug Pricing Program is now the second-largest federal prescription drug program in the nation, but it was originally created to help eligible hospitals and safety-net providers serve low-income or rural communities. Under the 340B program, certain hospitals can purchase most outpatient drugs with an average 34.7% discount from drug manufacturers, according to the U.S. Centers for Medicare and Medicaid Services. Theoretically, 340B hospitals would share these discounts with patients or reinvest the savings in vulnerable communities — but they face no legal requirement to do so.

When treating state employees with outpatient oncology infusion drugs, North Carolina 340B hospitals levied an average price markup of 5.4 times their discounted acquisition costs. In contrast, non-340B hospitals were paid 2.9 times the prevailing U.S. commercial price. Despite the charitable mission of the program, 340B hospitals billed the State Health Plan at an 84.8% higher price markup than hospitals outside of the program, according to an analysis of medical claims from the North Carolina State Health Plan for Teachers and State Employees from 2020 to 2022.

Individual 340B hospitals collected as much as $6,026 in average profits per claim by charging up to 12.7 times their 340B acquisition costs for oncology drugs. For example, patients paid Atrium Wake Forest Baptist Health's High Point Medical Center an average of $5,353 for the oncology drugs that it acquired for an average $517. In other words, state employees and taxpayers paid 10.4 times the 340B acquisition costs.

Sizable price markups were common across the 340B hospitals that filed more than 300 claims for treating state employees with cancer. Fifteen of these 21 hospitals billed state employees at least triple their acquisition costs, with a significant number netting more than five times their 340B acquisition costs. Even for one treatment with Pembrolizumab, a cancer drug used to treat melanoma, 340B hospitals reaped an average $13,617 profit off the State Health Plan, charging $21,512 for a drug they acquired for an estimated $7,985.

Although the public lacks any oversight of hospitals' revenues from the 340B program, evidence suggests that these price markups produced significant profits. North Carolina 340B hospitals recorded higher net profit margins, on average, than non-340B hospitals from 2013 to 2021. The majority of 340B hospitals even enjoyed double-digit net profit margins during the COVID pandemic in 2021, with an average 15.5% net profit margin. Atrium Health alone reported that its 340B discounts from hospitals' normal acquisition prices were worth $693

million in 340B cost savings from 2018 to 2020. After factoring in the price markups charged to patients with insurance, Atrium Health's 340B profits were likely far larger. When Atrium Health recorded $252 million in 340B cost savings in 2020, that represented a 1,843% increase from its $13 million savings in 2008, according to researchers' analysis of hospital audited financial statements and Medicare Cost Report data.

Our findings indicate that some hospitals are using the 340B program to enrich themselves rather than to serve vulnerable communities. The vast majority of North Carolina 340B hospitals did not provide enough charity care to equal the estimated value of their tax exemptions. Worse, 340B hospitals numbered among those that reported the lowest investments in charity care from 2011 to 2021, and Atrium Health reported $50.6 million more in 340B cost savings than the systems' total charity care spending in 2018.

Instead of using their discounts to benefit vulnerable communities, 340B hospitals expanded into wealthier neighborhoods with a higher percentage of insured individuals who could pay more for the drugs.

North Carolina witnessed exponential growth in the 340B program after the Affordable Care Act was passed. The number of 340B hospitals' contracts with external pharmacies leapt from six in 2010 to 1,059 in 2022. Federal census data show that this expansion did not primarily benefit impoverished communities. Instead, 340B hospitals contracted with pharmacies in wealthier neighborhoods, where the average inflation-adjusted median household income was $76,194 in 2020. This was 41.5% more affluent than in 2012, when hospitals' 340B contracts served neighborhoods with an average inflation-adjusted median household income of $53,857.

The same trend lines applied to uninsured patients and Black residents. In 2013, 340B hospitals served neighborhoods where an average 17.4% of the population was uninsured. By 2020 they contracted with pharmacies located in neighborhoods where, on average, just 9.5% of the population was uninsured. Likewise, 340B hospitals' contracts with pharmacies served neighborhoods with a lower average percentage of Black residents over time.

Too many hospitals have converted the 340B drug discount program into a profit center at the expense of state employees, cancer patients, and taxpayers. The North Carolina State Health Plan cannot afford to pay such exorbitant price markups, particularly when existing evidence suggests that impoverished patients are not the primary beneficiaries of the 340B program. The State Health Plan requests that policymakers require profitable 340B hospitals to share their discounts with state employees, teachers, and taxpayers.

At the very least, policymakers should consider strengthening public oversight of the 340B program by introducing transparency requirements and bolstering accountability for hospitals' charitable mission. Ultimately, the 340B program's systemic lack of accountability has hurt those 340B hospitals and other safety-net providers that operate in good faith to provide lifesaving care to disadvantaged patients.

Introduction: Cancer, Profits, and Inequity

Under the 340B Drug Pricing Program, North Carolina hospitals overcharged state employees, targeted wealthier neighborhoods, and recorded massive profits

Millions of patients struggle to afford prescription drugs, with about three in 10 Americans reporting they didn't take medicine as prescribed because of costs.[1] The United States pays significantly higher prices for health care than other developed nations,[2] suppressing workers' wage growth and straining families' resources.[3] High health care costs have made North Carolina home to some of the worst levels of medical debt in the nation,[4] and its hospitals have sued more than 7,500 patients to collect medical debt, causing cancer survivors to fear seeking future medical care.[5]

The North Carolina State Health Plan for Teachers and State Employees faces unsustainable inflation in prescription drug costs. The State Health Plan's total spending on prescription drugs leapt 49.1% from $1.07 billion in 2018 to $1.6 billion in 2022, fueled by a 75.7% increase in specialty drug costs over the same four years. The cost of the Plan's medical claims has followed the same unsustainable trends, rising 18.8% from $2.44 billion in 2018 to $2.9 billion in 2022 — equivalent to more than a tenth of the $27.9 billion state budget that year.

The State Health Plan is not in a position to bear these increasing costs. The Plan faces a $32 billion unfunded liability, and it is expected to fall below its mandated reserves by 2025. There are only three major levers that can prevent this possibility: Meaningful cost control with price relief for patients and the Plan, the appropriation of billions more taxpayer dollars, or reductions in benefits with premium increases and/or higher deductibles. Solving the underlying problem of high costs is therefore critical for protecting the financial health of both state employees and taxpayers.

The 340B Drug Pricing Program is the second-largest federal prescription drug program in the nation, behind only Medicare Part D.[6] Congress created the 340B Drug Pricing Program in 1992 to help eligible hospitals and safety-net providers serve low-income or rural communities, with the intent "to stretch scarce federal resources as far as possible, reaching more eligible patients and providing more comprehensive services."[7] Under the 340B drug pricing program, drug manufacturers must give discounts when selling outpatient drugs to qualifying hospitals and other eligible grantees in order to participate in the Medicaid Drug Rebate program.

340B hospitals can purchase most outpatient drugs — with the exception of vaccines and orphan drugs that treat

rare medical conditions — with 20% to 50% discounts from drug manufacturers.[8] The size of these discounts is set by federal regulations that penalize drug manufacturers for raising drug prices faster than inflation. Hospitals and other eligible 340B providers are entitled to a minimum discount of at least 23.1% of Average Manufacturer Price (AMP) on most brand name drugs. Because of the inflationary penalties, however, the final discounts are often far more substantial.

The U.S. Centers for Medicare and Medicaid Services (CMS) estimated that 340B hospitals receive an average 34.7% discount from the prevailing U.S. commercial price, otherwise known as Average Sales Price (ASP).[9] This is a conservative estimate that does not include "penny-priced" drugs, or the drugs that hospitals can purchase for one cent if the manufacturer has incurred the maximum penalty for price inflation. These penny-priced drugs have included the blockbuster arthritis drug Humira,[10] which retailed for $6,922 a month.[11]

340B hospitals have no legal obligation to pass these discounts on to patients or to invest the savings in vulnerable communities. The 340B program was designed to financially support hospitals and clinics that provide safety-net care by giving them discounts on outpatient drugs, but the program did not specify how these savings should be used or require any reporting of revenue. A growing body of academic literature, as well as research from large employers, have accused the 340B program of becoming "a major profit center for the intermediaries, who mark up the drugs and pocket the difference."[12] Studies have also criticized hospitals for increasing their profits by targeting commercially insured patients,[13] rather than fulfilling the program's original purpose to care for impoverished patients and disadvantaged communities.[14] Commercially insured and Medicare patients offer higher payments for drugs than uninsured or Medicaid patients, making it possible for hospitals to accumulate greater spread profits.

Exhibit A

340B Hospitals Receive Discounts From Drug Manufacturers on Most Outpatient Drugs

340B Hospitals Buy Drugs for an Average:

= ASP - 34.7%

or as little as $0.01

Medicare Part B Pays Hospitals:

= ASP + 6%

for certain drugs

The State Health Plan Pays 340B Hospitals:

= ASP X 3.5

for outpatient oncology drugs

Under the program's current regulatory structure, there is little transparency and no public oversight of the profits that hospitals can generate from the 340B program.[15] Furthermore, past research has raised concerns over the behavior of nonprofit hospitals and their commitment to their charitable mission. The billing and debt collection practices of nonprofit hospitals have become so contradictory to the expectations for tax-exempt entities that Human Rights Watch has called nonprofit hospitals "wolves in sheep's clothing."[16] North Carolina hospitals have participated in many of the worst medical debt collection practices, charging inflated prices,[17] encouraging patients to enroll in medical credit cards charging usurious interest,[18] billing almost $150 million to impoverished patients in one year,[19] and suing 7,517 patients over medical debt.[20]

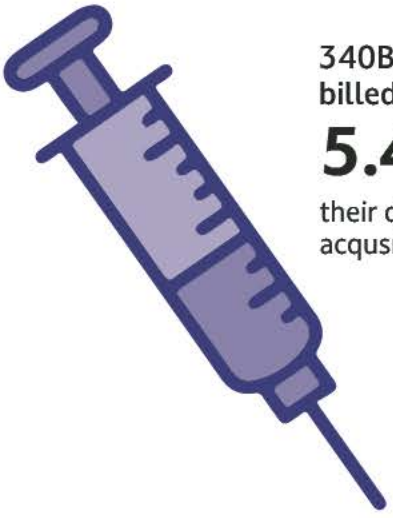
North Carolina State Treasurer Dale R. Folwell, CPA, invited researchers from the North Carolina State Health Plan for Teachers and State Employees to investigate the financial impact of 340B hospitals' spread pricing on state employees and taxpayers. The State Health Plan invited researchers to analyze State Health Plan medical claims data for outpatient oncology infusion drugs from 2020 to 2022 as part of the Employer Hospital Price Transparency Study. These researchers calculated hospitals' average price markups per claim, and further isolated the prices the State Health Plan paid for six common oncology drugs: Pertuzumab, pembrolizumab, trastuzumab, nivolumab, daratumumab, and avastin/bevacizumab. When calculating 340B hospitals' average acquisition costs for oncology drugs, researchers relied on CMS's conservative estimate that 340B hospitals received an average 34.7% discount from ASP.

With assistance from University of Minnesota researchers, the State Health Plan also investigated 340B hospitals' commitment to the charitable mission of the 340B program. Researchers analyzed data from the

Exhibit B

North Carolina Hospitals' Average Price Markups Billed to the State Health Plan for Oncology Drugs

Source: Researchers' Analysis of State Health Plan Medical Claims Data



340B hospitals billed

5.4X

their discounted acqusition costs

Other hospitals billed

2.9X

their Average Sales Price

U.S. Health Resources and Services Administration, socioeconomic data from the U.S. Census Bureau's American Community Survey, hospital audited financial statements and hospital Medicare Cost Report data from the National Academy for Health Care Policy's Hospital Cost Tool from 2010 to 2022.

They found that North Carolina 340B hospitals billed cancer patients and the State Health Plan 5.4 times of their discounted acquisition costs on average, collecting an 84.8% higher price markup than non-340B hospitals for oncology drugs. Individual 340B hospitals charged as much as 12.7 times above their discounted acquisition costs, generating profits that averaged $157 to $6,026 per claim filed for oncology drugs. Even individual cancer drugs yielded sizable profits. For example, each claim filed for nivolumab, a drug used to treat lung cancer, yielded an average profit of $10,744 off the State Health Plan. 340B hospitals acquired the drug for an estimated $5,992 but charged sick patients an average $16,736 per claim.

Although individual 340B hospitals operated on slender or negative margins, North Carolina 340B hospitals recorded higher net profit margins on average than non-340B hospitals in the state from 2013 to 2021. The public lacks any oversight into hospital 340B revenues, but the audited financial statements of the nation's fifth-largest health system, Atrium Health, provide a rare glimpse into the financial benefits gained by participating in the 340B program. Atrium Health reported $693 million in total 340B cost savings from 2018 to 2020.

The 340B program has a significant reach in North Carolina. The state was home to 41 340B hospitals in 2022. Over the past decade, hospitals greatly expanded the 340B program's foot-

Exhibit C

340B Hospitals Reaped an Average Profit of $13,617 Per Claim Filed for the Immunotherapy Drug Pembrolizumab

Source: Researchers' Analysis of State Health Plan Medical Claims Data

340B Hospitals Pay:

$7,895

to acquire the drug
= ASP - 34.7%

Medicare Pays:

$12,816

per hospital claim
= ASP + 6%

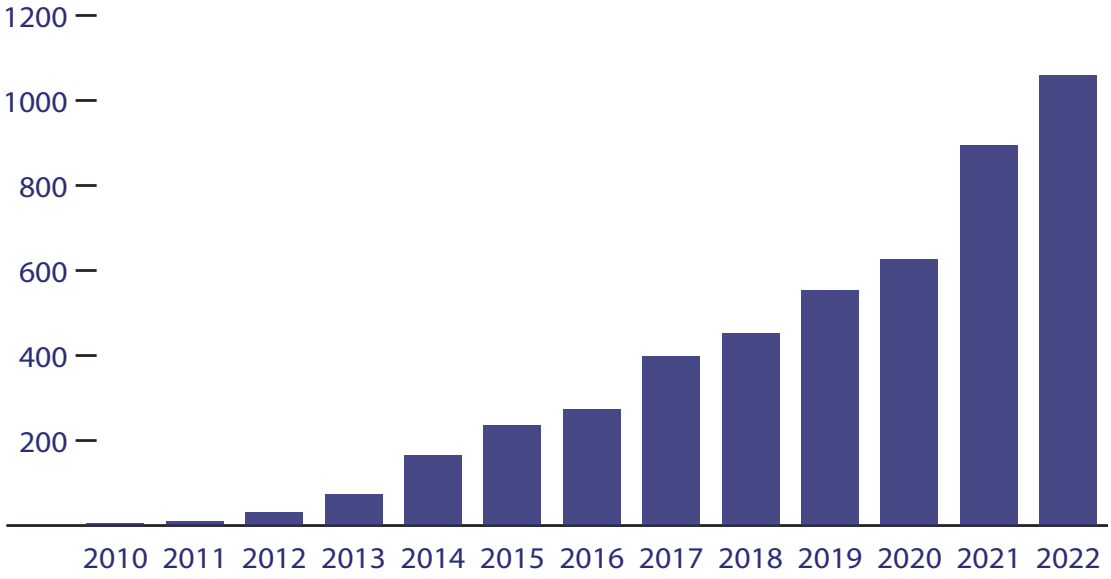
State Health Plan Pays:

$21,512

per hospital claim
= ASP + 78%

Exhibit D

The Number of North Carolina 340B Hospitals' Contracts With Pharmacies, 2010 to 2022



Source: Researchers' Analysis of University of Minnesota's 340B dataset

print by contracting with more external pharmacies and by adding off-site outpatient facilities, otherwise known as "child sites." 340B hospitals can receive their steep discounts on outpatient drugs dispensed by these locations, which enables them to dispense more drugs obtained at discounted prices, thus generating larger profit spreads. 340B hospitals held 1,059 contracts with a total 484 pharmacies in 2022, up from just six in 2010. Hospitals also expanded their network of 340B child sites, which rose from 70 in 2010 to 690 in 2021.

As the 340B program grew in size, it strayed from its original mission of assisting the financially vulnerable and uninsured. According to federal socioeconomic census data, many 340B hospitals primarily expanded their network of pharmacies and child sites into wealthier communities with higher household incomes and higher rates of health insurance, rather than in disadvantaged communities. Furthermore, the majority of North Carolina 340B hospitals did not provide enough charity care to equal the estimated value of their tax exemptions, according to Medicare Cost Report data.

The census data findings highlight the need for reform, especially the demand for greater transparency over hospitals' 340B revenues, profits, health insurance payer mix, and policies that dictate when they share 340B discounts with patients. The State Health Plan cannot afford to continue paying 340B hospitals more than five times on average what it cost them to treat state employees with cancer, especially if these funds are used to support hospital interests rather than safety-net care.

Prior Literature: The 340B Drug Program

The 340B program became the subject of intense controversy after the Affordable Care Act passed and subsequent regulatory guidance broadly expanded the scope of the program. Originally, the only hospitals that could qualify for the program were the disproportionate share hospitals that served a large share of low-income and Medicaid patients. Further limiting the program's reach, regulations blocked these hospitals from receiving 340B discounts on self-dispensed drugs at more than one outside "contract" pharmacy. The Affordable Care Act relaxed these restrictions, however, by admitting additional types of hospitals, eliminating the cap on contract pharmacies and unleashing a period of rapid growth.[21] This expansion allowed 340B hospitals to receive discounts on drugs dispensed at an unlimited number of community retail pharmacies, exponentially increasing the volume of drugs and the profits generated through the program.

By 2021, the 340B program accounted for 7.2% of U.S. gross drug spending, with discounted purchases exceeding $44 billion, according to the U.S. Department of Health Resources and Services Administration.[22] Nationally, the number of 340B retail contract pharmacies experienced exponential growth. They swelled from 789 in 2009, which represented just 1.3% of all retail pharmacies, to 25,775, or 40.9% of retail pharmacies, in 2022.[23] Hospitals drove much of this growth and were responsible for 87% of the total $43.9 billion in covered entity purchases in 2021.[24] The 340B program now encompasses six categories of nonprofit and governmental hospitals: Children's hospitals, critical access hospitals, disproportionate share hospitals, freestanding cancer hospitals, rural referral centers, and sole community hospitals.

Critics argue that the 340B program lacks the oversight, transparency and safeguards to prevent the discounts from being captured by hospitals and other middlemen rather than flowing to vulnerable patients. 340B hospitals are not required to pass along their discounts to patients, and, among the 340B hospitals surveyed by the U.S. Government Accountability Office, 57% said they did not provide discounts to patients at their 340B contract pharmacies.[25]

Under current law, 340B hospitals are not required to use the 340B program to help disadvantaged communities. 340B hospitals receive discounts on outpatient drugs regardless of patients' income or insurance status. Furthermore, 340B hospitals enjoy these discounts at an unlimited number of affiliated clinics and external contract pharmacies, none of which must qualify on their own as safety-net providers. Pharmaceutical manufacturers in particular have focused much of their

criticism on these contract pharmacies, pushing to cap their numbers, to introduce accountability measures for community benefits, and to ultimately shrink the 340B program.[26]

North Carolina hospitals have been a touchstone of the controversy over the 340B program since 2012. A 2012 News and Observer investigation found that North Carolina 340B hospitals "are dramatically inflating prices on chemotherapy drugs" and marking up prices on cancer drugs as much as 10 times over cost.[27] The investigation described patients who drained their savings to pay for chemotherapy drugs or who fatally delayed care because of concerns about costs. The investigation suggested that hospitals were overcharging patients for life-saving cancer drugs rather than passing on the 340B discounts.

After the newspaper's investigation, U.S. Sen. Chuck Grassley accused North Carolina hospitals of maximizing their profits by targeting commercially insured patients, rather than honoring the program's intent to serve vulnerable or uninsured patients. In response to questions from Grassley, Atrium, UNC, and Duke Health reported that 22.6% to 74% of their 340B patients were commercially insured, while as little as 4% were uninsured. These three hospital systems generated a combined $578.4 million in revenue from participating in the 340B program from 2009 to 2012. Grassley's office concluded that the findings painted a "stark picture of how hospitals are reaping sizable 340B discounts on drugs and then turning around and upselling them to fully insured patients covered by Medicare, Medicaid, or private health insurance in order to maximize their spread."[28]

Other research echoes these troubling findings. In New York, 340B hospitals billed the state employee health plan as much as 25 times the average sales price, according to an analysis of outpatient drug claims conducted by the New York-based union 32BJ, an affiliate of the Service Employees International Union.[29] Another analysis of federal price transparency files estimated that 340B hospitals charged a median markup of 3.8 times their acquisition costs for top oncology drugs. That allowed a 340B hospital to buy the myeloma treatment drug Darzalex for $76,320 but bill a commercially-insured patient $290,016 over the first year of treatment. This analysis also noted that 340B hospitals did not discount drugs for uninsured patients who paid cash.[30]

Researchers also raised concerns that hospitals' 340B discounts were diverted from underserved or needy populations after the program's expansion. Multiple academic studies have found that growth in the number of 340B contract pharmacies was uncorrelated with uninsured rates, poverty rates, or medical underservice.[31] Other studies of 340B hospital community benefits have indicated that, contrary to the stated intent of the federal program, 340B hospitals had similar or lower charity care spending than hospitals outside of the drug discount program.[32] Prior research also found that hospitals that joined the 340B program in later years served communities that were wealthier rather than vulnerable patient populations, suggesting that the "340B program is being converted from one that serves vulnerable patient populations to one that enriches hospitals and their affiliated clinics."[33]

At least one hospital used a poor, black neighborhood to reap sizable profits off the 340B drug program, according to an investigation by The New York Times. Virginia's Bon Secours hospital system generated huge profits from its 340B eligible hospital, but it funneled these profits away from that safety-net provider and into the system's other locations, slashing services for low-income patients and redirecting resources into wealthier neighborhoods.[34] A Wall Street Journal investigation also found that 340B hospitals provided a similar level of charity care as other hospitals, writing off 2.7% of their patient revenue as charity care, while non-340B hospitals not benefiting from the steep discounts wrote off a nearly identical 2.6%. Furthermore, among 111 hospitals that qualified for the program as rural referral centers, 88 were not located in rural areas.[35]

The 340B program is now the subject of a bitter feud between hospitals and pharmaceutical manufacturers. Arguing that the 340B program was riddled with fraud and abuse, drugmakers began refusing to give 340B discounts to an unlimited number of contract pharmacies in the summer of 2020.[36] More than 20 drugmakers have restricted 340B discounts to just one contract pharmacy, or refused to provide discounts until the covered entity submitted contract pharmacy claims data.[37] These restrictions raised an outcry from 340B hospitals, who accused the pharmaceutical manufacturers of maximizing profits by devastating the finances of safety-net and rural hospitals.[38]

Safety-net clinics that depend on 340B discounts to make prescriptions affordable for impoverished patients have also become embroiled in the dispute.[39] The 340B program also encompasses non-hospital safety net providers, such as community health centers, that face strict standards to adhere to their charitable mission. These safety-net providers have not been included in this report's analysis, but they have reported struggling to help patients afford care after the restrictions on contract pharmacies.[40]

While 340B hospitals and pharmaceutical manufacturers wage a protracted legal battle in court, patients in North Carolina are struggling to afford health care, and businesses have found it increasingly difficult to invest in their employees because of rapid health care price inflation.[41] Workers now lose an average 20% of each paycheck to support health care costs,[42] and more than 100,000 patients have opened "medical credit cards" than can charge up to 18% interest on medical debt in North Carolina.[43]

Methodology

At the invitation of Treasurer Folwell and as part of their Hospital Price Transparency project, researchers analyzed State Health Plan medical claims on oncology and infused drugs provided at North Carolina hospitals from 2020 to 2022. Because these drugs are covered by the medical benefit prices (e.g., allowed amounts), they represent transacted prices, and are not subject to future rebates. For each, the ratio of private insurance prices to average sales price (ASP) was calculated.

ASP is the weighted average of all the manufacturers' sales prices after including the rebates and discounts that are negotiated between manufacturers and purchasers, with the exception of Medicaid, 340B discounts, and certain other federal discounts. Medicare reimburses providers for administered drugs at a rate of ASP plus six percent.

For each hospital with sufficient data, the mean ratio of private insurer prices relative to ASP was calculated. Hospitals were linked to systems using the AHRQ Compendium of U.S. Health System data.

Researchers also analyzed the prices billed to the State Health Plan for six common oncology drugs: Pertuzumab, pembrolizumab, Trastuzumab, nivolumab, daratumumab, and Avastin/bevacizumab. These drugs accounted for more than 8,000 claims billed to the State Health Plan, and they are used to treat melanoma, breast cancer, stomach cancer, lung cancer, colorectal cancer, glioblastoma and ovarian cancer, among others.

To calculate North Carolina hospitals' 340B discounts, researchers relied on the U.S. Centers for Medicare and Medicaid Services' (CMS) estimate that 340B hospitals receive an average 34.7% discount from ASP. CMS developed this estimate through methodology that was said to arrive at the most conservative reduction to ASP, based on the April and May 2020 CMS survey that collected information about 340B hospitals' net acquisition costs for drugs purchased through the program.

340B hospitals are entitled to receive a minimum discount of 23.1% from ASP for most brand-name prescription drugs. The 340B program levies penalties against drugmakers that increase the price of drugs faster than inflation, however, and as a result 340B hospitals often receive larger discounts when purchasing outpatient drugs. CMS's estimate is a conservative figure that does not include penny priced drugs, or the drugs that hospitals can buy for as little as one cent.

In order to ascertain the demographics of the neighborhoods served by 340B hospitals' contract pharmacies and child sites, researchers from the State Health Plan and the University of Minnesota used data from the U.S. Health Resources and Services Administration's 340B Office of Pharmacy Affairs Information System, as well as socioeconomic data from the U.S. Census Bureau's American Community Survey.

Researchers obtained hospital variables, including net charity care spending and net profit margins, from Medicare Cost Report data in the Hospital Cost Tool developed by the National Academy for State Health Policy, Rice University's Baker Institute of Public Policy, and Mathematica.

Researchers also used Atrium Health's audited financial statements**,** which disclosed Atrium Health's 340B savings. Although the audited financial statements did not disclose the methodology used to calculate these savings, the contractor for the HRSA 340B program, Apexis, directs covered entities to calculate their 340B cost savings as the difference between the 340B drug cost and the cost of the drug if purchased under the distributor, group purchasing organization, or warehouse under their contract. Atrium Health's actual 340B profits, or the spread between the hospitals' discounted acquisition costs and the price billed to patients, is likely much larger.

Results: Cancer Drugs, Price Markups and 340B Profits

The 340B program underwent a period of exponential growth in North Carolina after the Affordable Care Act broadened its scope, according to data from the U.S. Health Resources and Services Administration. 340B hospitals contracted with just six external pharmacies in 2010, but that number exploded to 484 in 2022. 340B hospitals' contractual relationships grew still more rapidly, as one pharmacy can hold multiple 340B contracts. North Carolina 340B hospitals' contracts with these external pharmacies jumped from 6 in 2010 to 1,059 in 2022. Hospitals also grew their networks of outpatient 340B child sites from 70 in 2010 to 690 in 2021.

The majority of 340B hospitals' contracts with external pharmacies was concentrated in a few hospital systems. In 2021, Atrium held 336 of hospitals' total 1,059 contracts with pharmacies, while Cone, Novant, UNC, Vidant, and WakeMed Health each reported more than 90 contracts with external pharmacies. A total of 41 hospitals participated in the 340B program in 2022.

Five for-profit, multibillion-dollar pharmacy chains held the vast majority of the 1,059 contracts with 340B hospitals in 2022. Walgreens topped the list with 31% of the 340B contracts, followed by CVS Pharmacy, Walmart, and United Healthcare, and Cigna. (See Exhibit F). Depth also increased over time. In 2010, no contract pharmacy had more than one contract with a 340B hospital, but by 2022, 73.3% of pharmacies had one contract, 23.3% had two to nine, and 3.3% of pharmacies had 10 or more contracts.

Out-of-state pharmacies held 40.8% of 340B hospitals' contracts with pharmacies in 2022. North Carolina hospitals contracted with only one out-of-state pharmacy in 2013, but they recorded 432 contracts with out-of-state pharmacies by 2022. Roughly half of 340B hospitals' contract activity with out-of-state pharmacies was concentrated in Florida, Texas, Arizona and Pennsylvania in 2022.

HOSPITALS PROFIT ON 340B PRICE MARKUPS

Many hospitals are capturing 340B drug discounts rather than passing on the savings to cancer patients and state employees, according to an analysis of hospitals' pricing for infused and injectable specialty drugs based on 2020-2022 claims data from the North Carolina State Health Plan. This analysis focused primarily on oncology treatments, but researchers also worked to include other infused drug classes, as well as the individual average markups for six common cancer drugs.

Exhibit E

Four in 10 of 340B Hospital Contracts Were With Out-of-State Pharmacies

340B hospitals' contracts with pharmacies by state in 2022.

Source: Researchers' Analysis of University of Minnesota's 340B dataset

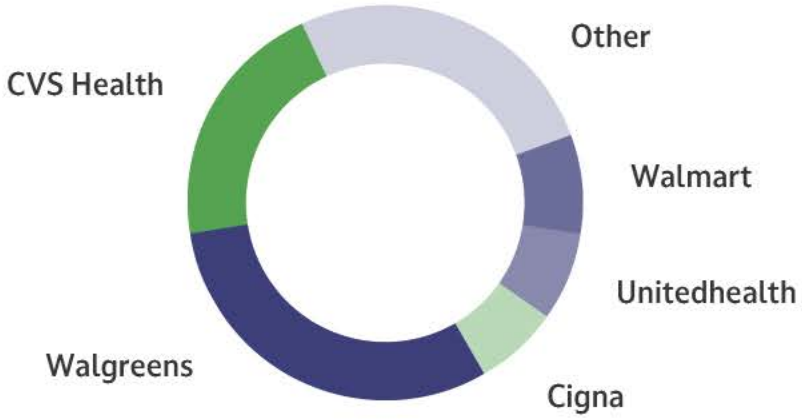
Researchers calculated 340B hospital markups by comparing the allowed amount paid by the State Health Plan with hospitals' 340B estimated acquisition costs after their 34.7% discount from ASP, as reported by the Centers for Medicare and Medicaid Services (CMS) in its annual Hospital Outpatient Prospective Payment System rulemaking in 2020.

They found that North Carolina 340B hospitals reaped an average markup of 3.5 times from ASP on the outpatient oncology infusion drugs used to treat state employees and their dependents from 2020 to 2022. By contrast, non-340B hospitals were paid 2.9 times of ASP. After weighing for the average 340B discount, however, 340B hospitals' average markup rose to 5.4 times

Exhibit F

Three For-Profit Pharmacy Chains Hold Majority of Contracts with 340B Hospitals

Number of 340B contracts by pharmacy ownership in 2022.



Source: Researchers' Analysis of University of Minnesota's 340B dataset

their discounted acquisition costs — an 84.8% higher price markup than non-340B hospitals for oncology drugs.

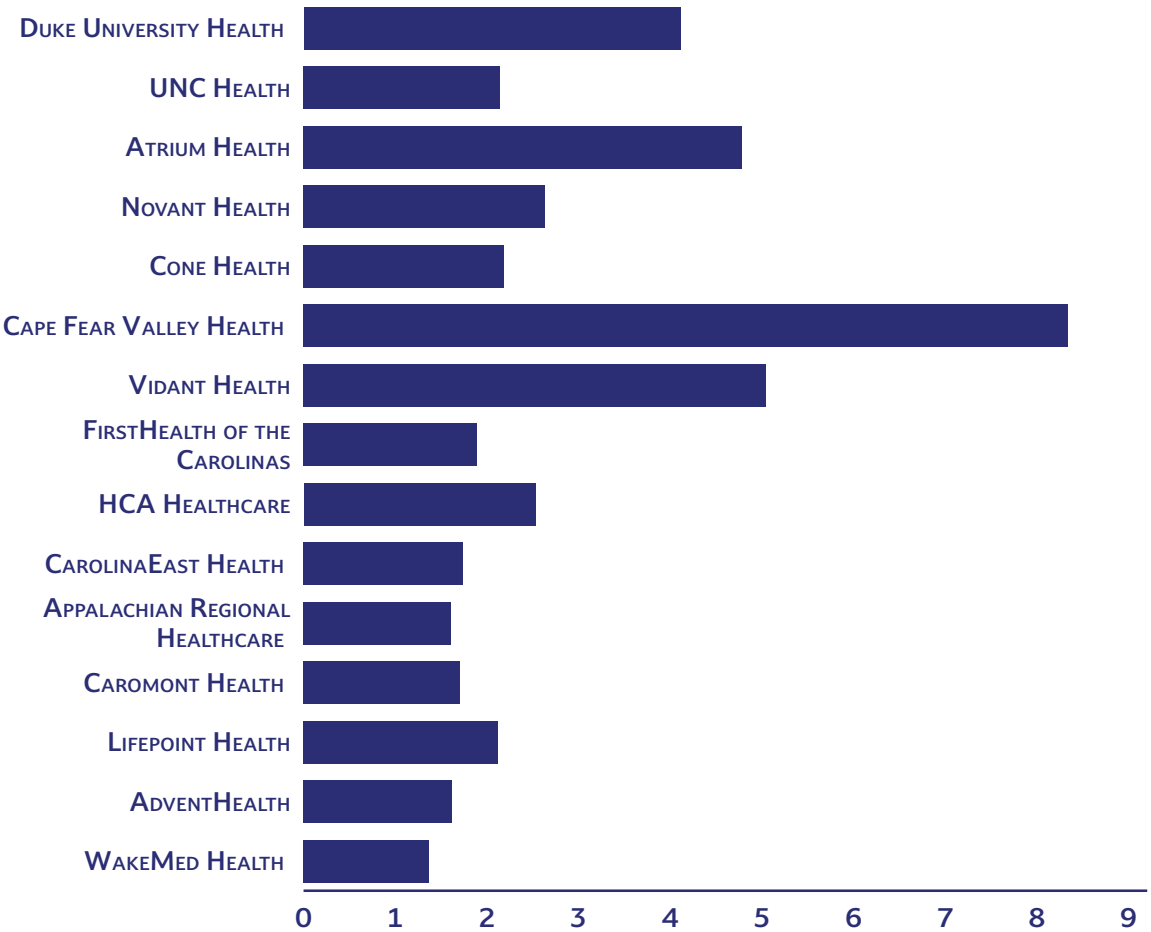
Individual 340B hospitals collected as much as 12.7 times their acquisition costs for oncology drugs. Across the 28 340B hospitals that filed more than 100 claims, five hospitals collected more than 9.5 times their discounted acquisition costs, 12 reaped more than 5.6 times their 340B acquisition costs, and 20 hospitals were paid at least three times what it cost them to obtain oncology drugs. (See Exhibit H). Cape Fear Valley Health, Vidant Health, Atrium Health and Duke University Health systems billed the highest average price markups to state employees and taxpayers for cancer treatment. (See Exhibit G).

On average, 340B hospitals made thousands of dollars in profits by marking up the prices of discounted oncology drugs. For example, Duke University Hospital acquired oncology drugs for an average $1,108 but billed state employees an average $7,134 allowed amount — or a spread profit of $6,026. Likewise, Atrium Wake Forest Baptist Health's High Point Medical Center billed an average $5,353 for drugs it acquired for an average $517 — or 10.4 times its acquisition costs. (See Exhibit H).

Exhibit G

Hospital Systems' Average Markup on Oncology Drugs

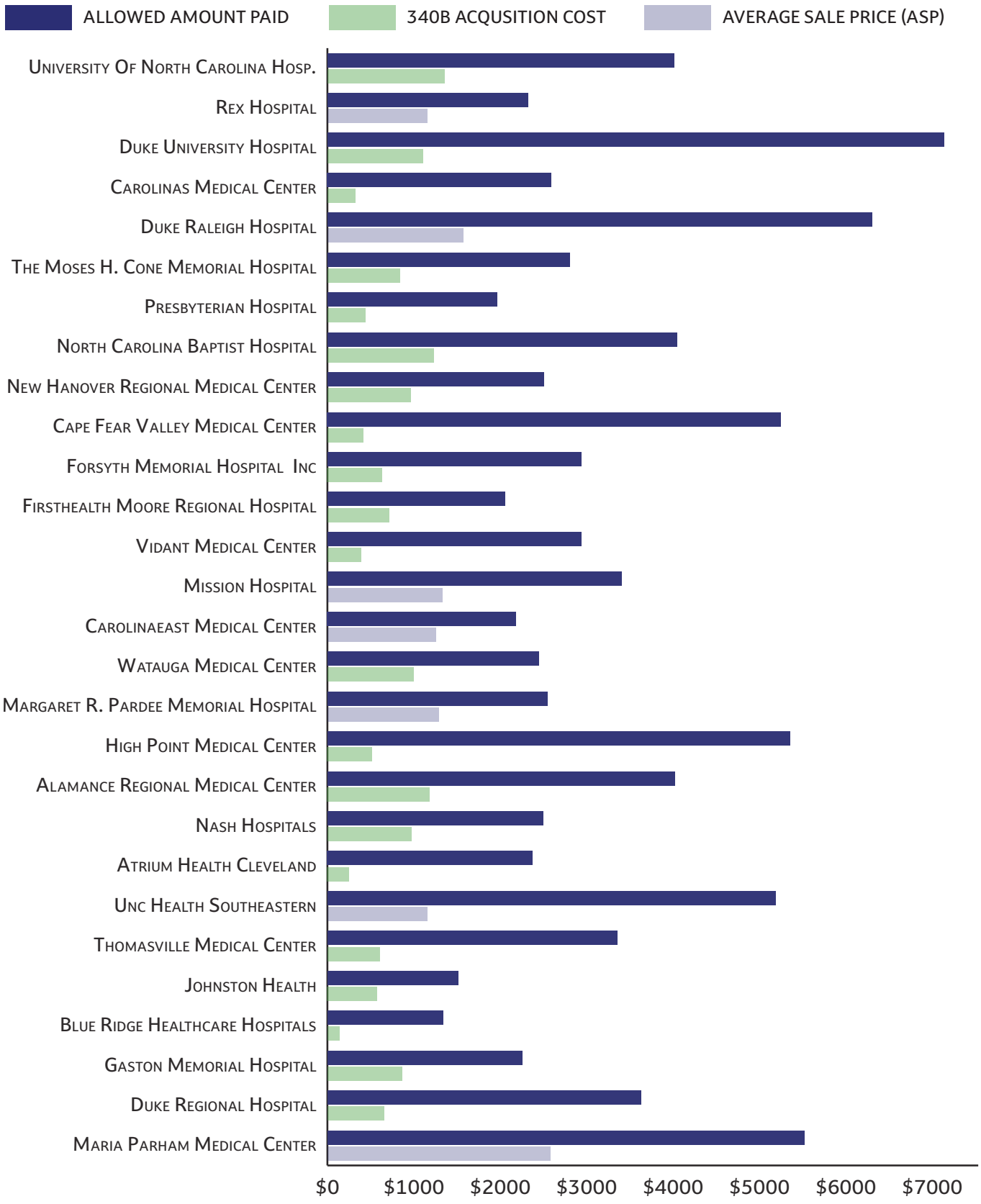
The Average Price Markup Paid by the SHP From ASP



Source: Researchers' Analysis of State Health Plan Medical Claims Data

Exhibit H

North Carolina 340B and non-340B Hospitals' Average Markups on Oncology Drugs Paid by the State Health Plan



Source: Researchers' analysis of State Health Plan Medical Claims Data. Hospitals that filed more than 300 claims are shown in descending order of claim volume.

Non-340B hospitals also billed significant price markups to teachers and state employees. For example, Mission Hospital collected $2,070 in profits by billing cancer patients an average $3,402 for drugs that cost the hospital $1,332. Among the non-340B hospitals that filed at least 100 claims, the average price markup billed to the State Health Plan ranged from 1.5 to 14.6 times ASP, depending on the hospital.

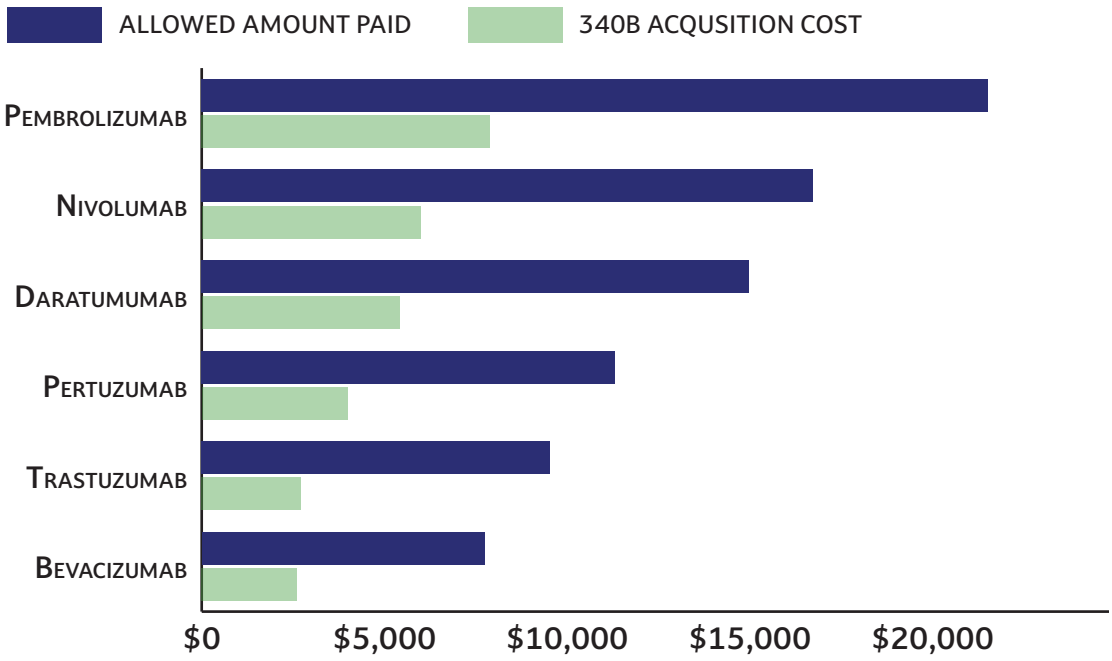
Researchers also analyzed the average prices paid by the State Health Plan for six common oncology drugs: Pertuzumab, pembrolizumab, Trastuzumab, nivolumab, daratumumab, and Avastin/bevacizumab.

Both 340B and non-340B hospitals collected 1.7 to 3.7 times their acquisition costs for these six cancer drugs. For the melanoma drug pembrolizumab, 340B hospitals billed state employees, including teachers, an average $21,512 after acquiring the drug for an estimated $7,895 — yielding a spread profit of $13,617 per claim. For the same drug, non-340B hospitals collected $11,736 in profits after acquiring the drug for $12,563 and billing $24,299 per claim.

Additional data show that some hospital systems enjoyed 340B discounts that were worth hundreds of millions of dollars, even without factoring in the price markups charged to patients. Although 340B hospitals do not have to report their revenues or profits from the 340B program, the public has an unusual level of insight into the finances of three North Carolina 340B hospitals, especially Atrium Health. After Sen. Grassley's 2013 investigation, Atrium Health reported its 340B cost savings on its audited financial statements from 2018 to 2020.

Exhibit I

North Carolina 340B Hospital Systems Average Markup on Common Oncology Drugs Per Claim



Source: Researchers' Analysis of State Health Plan Medical Claims Data

Exhibit J

Atrium Health's Average Price Markup Billed to Cancer Patients Under the State Health Plan from ASP

4.78X

price markup, or $3,003 per claim...

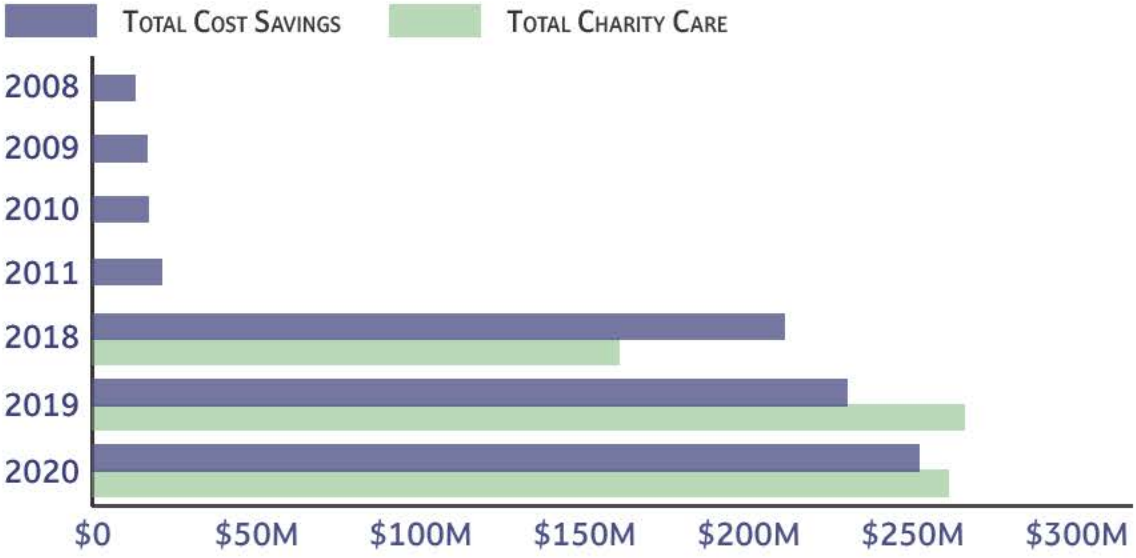
for drugs it acquired for an average $628 ASP

Source: Researchers' Analysis of State Health Plan Medical Claims Data

Atrium Health's 340B discounts generated $693 million in cost savings from 2018 to 2020. (See Exhibit K). Because this figure only measures the value of the 340B discounts, Atrium Health likely reaped far greater 340B profits after factoring in the price markups charged to insured patients. Atrium Health had 125 child sites and 105 contracts with external pharmacies in 2021,[44] up from just 11 and 4, respectively, in 2011. After expanding its network of 340B child sites and contract pharmacies, Atrium Health recorded a 1,843% increase in 340B cost savings, rising from $13 million in 2008 to $252 million in 2020. These recent savings dwarf the numbers reported by Sen. Grassley's 2013 investigation. In response to questions from the Sen. Grassley, Atrium Health reported earning $67.6 million in total profits from the 340B drug discount program from 2008 to 2011.[45]

Exhibit K

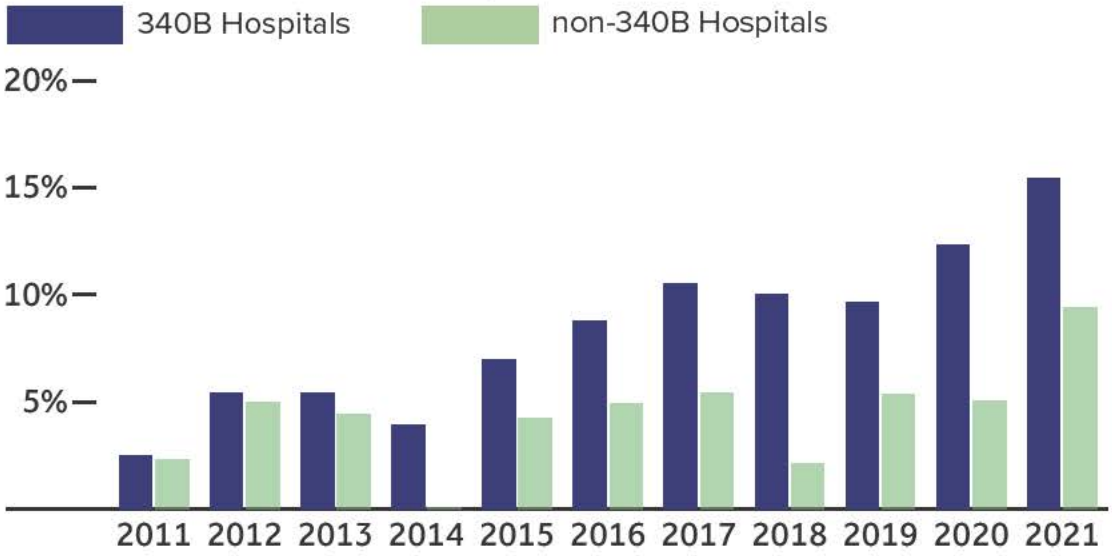
Atrium Health Self-Reported 340B Cost Savings and Charity Care Spending



Source: Atrium Health Audited Financial Statements, U.S. Sen. Chuck Grassley Investigation

Exhibit L

North Carolina 340B Hospitals Recorded Higher Average Net Profits Than non-340B Hospitals



Source: NASHP Hospital Cost Tool's Medicare Cost Reports

On average, North Carolina 340B hospitals enjoyed higher average net profit margins than non-340B hospitals each year from 2011 to 2021. Although 340B hospitals recorded a low net profit margin of 2.5% on average in 2011, their average profit margins soared as the program expanded.

According to Medicare Cost Reports, 34.5% to 66.7% of 340B hospitals recorded double-digit net profit margins from 2015 to 2021. For example, 340B hospitals averaged a 15.5% net profit margin in 2021, when the state's other hospitals averaged 9.4%. (See Exhibit L).

Exhibit M

340B Hospitals Reaped an Average Profit of $10,744 Per Claim Filed for the Immunotherapy Drug Nivolumab

Source: Researchers' Analysis of State Health Plan Medical Claims Data

340B Hospitals Pay:

$5,992

to acquire the drug
= ASP - 34.7%

Medicare Pays:

$9,727

per hospital claim
= ASP + 6%

State Health Plan Pays:

$16,736

per hospital claim
= ASP + 82%

Charitable Mission

Prior studies of 340B hospital community benefits have indicated that, contrary to the stated intent of the federal program, 340B hospitals did not have stronger charity care spending than hospitals outside of the drug discount program. Our data provides similar results. The majority of 340B hospitals did not provide enough charity care to justify their tax exemptions, and 340B hospitals increasingly served communities that were wealthier and had higher rates of health insurance compared to the program's earlier years. Our findings suggest that some hospitals are using 340B discounts to enrich themselves rather than serving vulnerable communities.

Nonprofit hospitals receive lucrative tax exemptions meant to support their charitable mission of caring for impoverished patients. A recent study estimated that the value of a nonprofit hospital's tax exemption was equal to 5.9% of total expenses,[46] but 73.6% to 86.8% of 340B hospitals spent less than that on charity care each year from 2016 to 2021. North Carolina 340B hospitals wrote off an average 3.5% of their expenses as charity care in the most recent Medicare filing in 2021 (See Exhibit N). Some of the hospitals that reported the lowest investments in charity care were 340B hospitals, and 15.6% of 340B hospitals spent less than 1% on charity care in 2021.

Under current law, there is no public oversight or transparency over how 340B hospitals use the profits from the drug discount program, and 340B hospitals are not required to use these profits to serve impoverished patients or disadvantaged communities. Atrium Health reported that its cost savings from the 340B program were $50.6 million larger than its reported charity care spending in 2018.

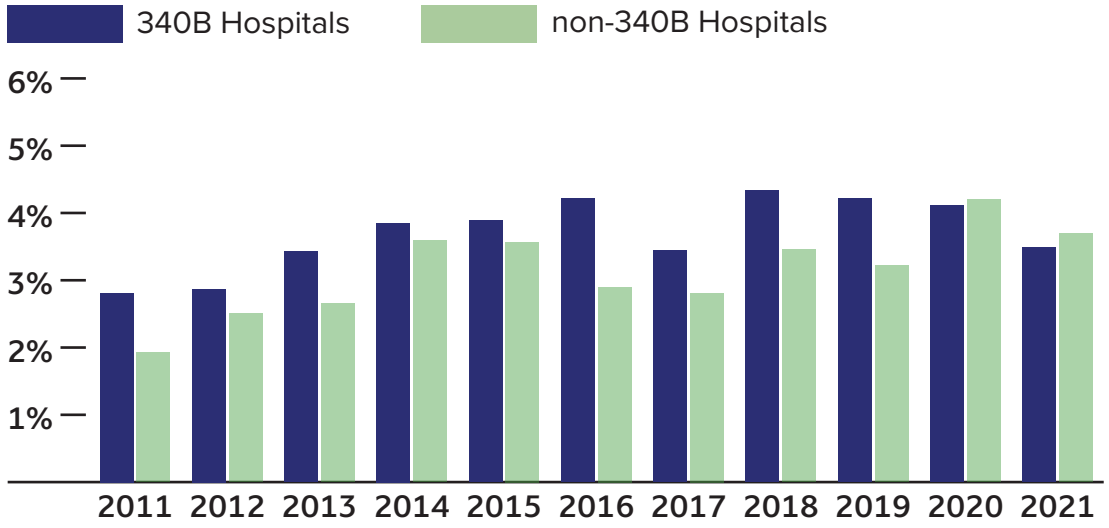
As the drug discount program expanded, 340B hospitals contracted with external pharmacies and child sites that were located in communities with higher household incomes and higher rates of health insurance. By 2020, there was a stark difference in the socioeconomic characteristics of the communities served by the program when compared to earlier years, according to socioeconomic data from the U.S. Census Bureau's American Community Survey.

Across the neighborhoods served by 340B hospitals' contracts with external pharmacies, the average inflation-adjusted median household income was $53,857 in 2012.[47] But by 2020, these contracts served neighborhoods with a $76,194 inflation-adjusted median household income — an increase of 41.5% (See Exhibit O). Hospital 340B child sites also served neighborhoods that were 24.4% more affluent in 2020 than in 2012. Furthermore, across the neighborhoods served by hospitals' 340B contracts in 2020, an average 58.2% of the population was in the two highest income brackets recorded by the American Community Survey, with an average 28.4% of the population earning a household income greater than $100,000.

As 340B hospitals increasingly contracted with pharmacies located in affluent communities, they also began serving areas that had higher rates

Exhibit N

North Carolina Hospitals' Average Charity Care Spending, 2010 - 2022

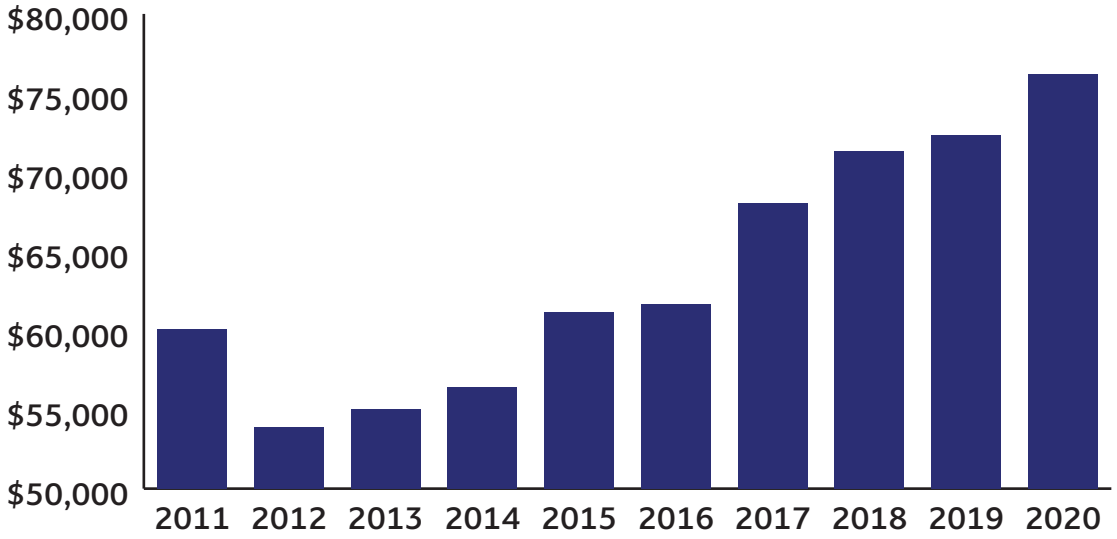


Source: NASHP Hospital Cost Tool's Medicare Cost Reports

of health insurance. 340B hospitals' contracts with external pharmacies targeted communities where an average 17.4% of the population was uninsured in 2013. By 2020, however, 340B hospitals' contracts served neighborhoods where an average of only 9.5% of the population lacked health insurance. Hospitals' 340B child sites followed a similar trajectory. They served neighborhoods where 14.8% of the population was uninsured on aver-

Exhibit O

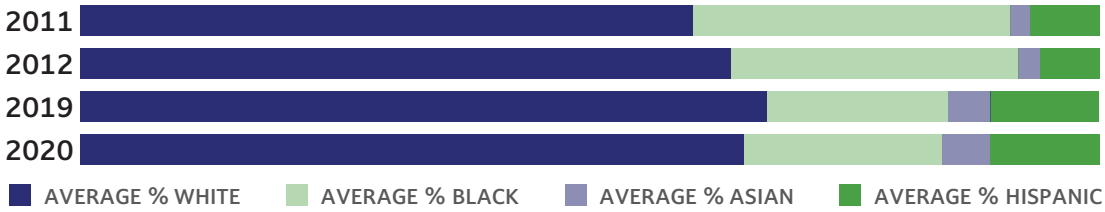
Average Inflation-Adjusted Household Income in Communities Served by Hospitals' 340B Contracts With External Pharmacies



Source: Researchers' Analysis of University of Minnesota's 340B dataset

Exhibit P

The Average Racial Demographics of the Neighborhoods Served by Hospitals' 340B Contracts with Pharmacies



Source: Researchers' Analysis of University of Minnesota's 340B dataset

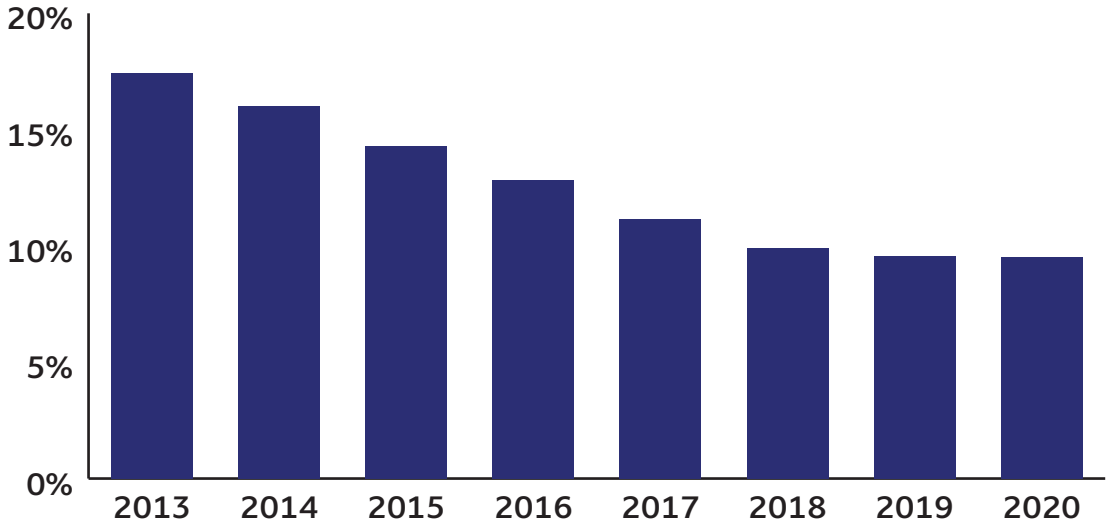
age in 2013, but, by 2020, they served neighborhoods with an average 9.4% uninsured rate. (See Exhibit Q).

Over time 340B hospitals' contracts with external pharmacies served neighborhoods that had fewer Black residents and more White residents. In 2011, White residents represented an average 60.6% of the population; Black residents, 31.4% of the population; Hispanic residents, 6.8% of the population; and Asian residents, 1.9% of the population served by hospitals' 340B contracts with pharmacies. By 2020, however, hospitals' 340B contracts served neighborhoods with a higher percentage of White and Hispanic residents on average: White residents represented 67% of the population; Black residents, 20% of the population; Hispanic residents, 11.1% of the population; and Asian residents, 4.8% of the population.[48]

340B hospitals are placing their contract pharmacies in areas with more affluent, insured patients, thereby increasing their profits from dispensing 340B drugs. These actions conflict with the intent of the 340B program: Serving vulnerable communities and dispensing drugs at discounted costs to impoverished patients.

Exhibit Q

The Average Uninsured Rate among Neighborhoods Served by Hospitals' 340B Contracts with Pharmacies



Source: Researchers' Analysis of University of Minnesota's 340B dataset

Conclusion

340B hospitals have used the State Health Plan to extract significant profits from taxpayers and state employees. These hospitals have billed cancer patients an average 5.4 times of their discounted acquisition costs. These price markups yielded hospital profits as high as $6,026 per claim, but this financial windfall seems to have come at the cost of some hospitals' charitable mission. The majority of 340B hospitals did not provide sufficient charity care spending in recent years, and many 340B contracts now serve wealthier communities instead of impoverished neighborhoods.

North Carolina hospitals charged teachers and state employees far more than what CMS considers a "fair price." As a rule, CMS reimburses non-340B hospitals a 6% spread from the cost of acquiring the drug (ASP + 6%) before extracting a 2% sequestration cut. This 6% spread, together with an administration fee, was deemed a "fair value" for non-340B hospitals. Furthermore, CMS tailored its reimbursements to 340B hospitals to reflect their lower acquisition costs from 2018 to 2022, before the U.S. Supreme Court ruled that the agency had not gathered sufficient input during rulemaking.[49]

These price markups are especially troubling because the majority of North Carolina hospitals self-reported profiting on Medicare from 2015 through 2020. Hospitals often cite Medicare losses as their largest community benefit spending, but these claims do not always match the data that hospitals self-report to the federal government. North Carolina hospital lobbyists claimed they lost $3.1 billion on Medicare in 2020 — but self-reported earning $87 million in Medicare profits. The lobbyists' loss claim was 3,670% larger than hospitals' actual Medicare profits.[50]

These findings underscore the need for greater transparency in the health care industry. The vast majority of patients still cannot see prices for hospital care, as only 36% of hospitals have fully complied with the federal Hospital Price Transparency Rule.[51] The public does not know whether 340B hospitals have used their discounts to benefit uninsured or impoverished patients. Current law does not even enable the public to access any information about hospitals' revenues or profits from the 340B program.

The State Health Plan requests that state and federal lawmakers enact legislation to increase transparency and accountability for hospitals in the 340B Drug Pricing Program. State lawmakers could dramatically improve oversight over 340B hospitals' revenues, profits, and patient case mixes.

The State Health Plan also asks state legislators to secure hospital price relief for the State Health Plan. A significant number of 340B hospitals have reported double-digit net profit margins in recent years, with Atrium Health alone reaping hundreds of millions of dollars in 340B cost savings each year. The State Health Plan cannot afford to continue paying exorbitant price markups, especially as mounting evidence suggests that hospitals' subsequent profits do not benefit impoverished patients or vulnerable communities.

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Acknowledgments

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North Carolina Average Markup on Oncology Drugs

340B: Y/N	Ratio Commercial - ASP	Allowed Amount	ASP	340B Acquisition Cost	340B Mark-up	Average Profit Spread	Number of Claims
YES	3.53	$3,677.71	$1,040.77	$679.62	5.41	$2,998.09	41,045
NO	2.93	$3,733.01	$1,274.99			$2,458.02	13,892

Hospital Average Markups on Oncology Drugs Billed to the North Carolina State Health Plan

Hospital System	Ratio Commercial - ASP	Allowed Amount	Number of Claims
UNC Health Care System	2.14	$3,142.33	16,319
Duke University Health System	4.11	$6,707.44	9,626
Atrium Health	4.78	$3,003.48	9,485
Novant Health	2.64	$2,465.43	7,288
Cone Health	2.19	$3,004.80	3,123
Cape Fear Valley Health System	8.34	$5,195.69	2,117
Vidant Health	5.04	$2,807.05	1,536
FirstHealth of the Carolinas	1.89	$2,054.37	1,321
HCA Healthcare	2.53	$3,263.65	835
CarolinaEast Health System	1.74	$2,184.49	700
Appalachian Regional Healthcare System	1.60	$2,446.25	664
Caromont Health System	1.70	$2,252.89	387
Lifepoint Health	2.13	$5,516.02	307
AdventHealth	1.62	$2,321.06	274
WakeMed Health and Hospitals	1.36	$1,134.94	178

Hospital Average Markups on Oncology Drugs Billed to the North Carolina State Health Plan

340B	Hospital	Ratio Commerical - ASP	Allowed Amount	ASP	340B Acquisition Cost	Profit Spread	Average Markup Commercial - 340B Cost	Number of Claims
YES	University Of North Carolina Hosp.	1.94	$4,012.78	$2,071.57	$1,352.73	$2,660.04	3.0	7,516
	Rex Hospital	2.01	$2,320.18	$1,154.03		$1,166.16		6,207
YES	Duke University Hospital	4.20	$7,134.14	$1,696.71	$1,107.95	$6,026.19	6.4	5,722
YES	Carolinas Medical Center	5.22	$2,591.75	$496.07	$323.93	$2,267.82	8.0	5,039
	Duke Raleigh Hospital	4.01	$6,306.71	$1,573.83		$4,732.89		3,576
YES	The Moses H. Cone Memorial Hospital	2.18	$2,803.60	$1,285.41	$839.37	$1,964.22	3.3	2,607
YES	Presbyterian Hospital	2.92	$1,961.99	$672.59	$439.20	$1,522.79	4.5	2,517
YES	North Carolina Baptist Hospital	2.14	$4,043.86	$1,888.19	$1,232.99	$2,810.87	3.3	2,505
YES	Novant Health New Hanover Regional Medical Center	1.70	$2,503.48	$1,475.95	$963.80	$1,539.68	2.6	2,160
YES	Cape Fear Valley Medical Center	8.29	$5,250.46	$633.49	$413.67	$4,836.78	12.7	2,094
YES	Forsyth Memorial Hospital Inc	3.03	$2,935.36	$970.24	$633.57	$2,301.79	4.6	2,043
YES	Firsthealth Moore Regional Hospital	1.89	$2,054.37	$1,087.55	$710.17	$1,344.20	2.9	1,321
YES	Pitt County Memorial Hospital	4.97	$2,940.93	$591.31	$386.13	$2,554.80	7.6	1,023

Hospital Average Markups on Oncology Drugs Billed to the North Carolina State Health Plan

340B	Hospital	Ratio Commerical - ASP	Allowed Amount	ASP	340B Acquisition Cost	Profit Spread	Average Markup Commercial - 340B Cost	Number of Claims
	Mission Hospital Inc	2.55	$3,402.15	$1,331.78		$2,070.37		772
	Carolinaeast Medical Center	1.74	$2,184.49	$1,255.87		$928.63		700
YES	Watauga Medical Center	1.60	$2,446.25	$1,524.44	$995.46	$1,450.79	2.5	664
	Margaret R. Pardee Memorial Hospital	1.98	$2,546.17	$1,286.43		$1,259.74		660
YES	High Point Medical Center	6.76	$5,352.59	$791.26	$516.69	$4,835.90	10.4	588
YES	Alamance Regional Medical Center	2.22	$4,021.35	$1,814.56	$1,184.91	$2,836.44	3.4	516
YES	Nash Hospitals Inc	1.68	$2,497.36	$1,483.09	$968.46	$1,528.90	2.6	509
YES	Atrium Health Cleveland	6.18	$2,375.97	$384.56	$251.12	$2,124.85	9.5	475
	Unc Health Southeastern	4.48	$5,187.45	$1,156.92		$4,030.53		469
YES	Thomasville Medical Center	3.64	$3,356.46	$922.68	$602.51	$2,753.94	5.6	432
YES	Johnston Health	1.72	$1,514.79	$880.39	$574.90	$939.90	2.6	431
YES	Blue Ridge Healthcare Hospitals	6.27	$1,338.46	$213.38	$139.34	$1,199.12	9.6	420
YES	Gaston Memorial Hospital	1.70	$2,252.89	$1,322.21	$863.40	$1,389.49	2.6	387
YES	Duke Regional Hospital	3.63	$3,632.37	$1,001.76	$654.15	$2,978.21	5.6	328

Hospital Average Markups on Oncology Drugs Billed to the North Carolina State Health Plan

340B	Hospital	Ratio Commerical - ASP	Allowed Amount	ASP	340B Acquisition Cost	Profit Spread	Average Markup Commercial - 340B Cost	Number of Claims
	Maria Parham Medical Center	2.14	$5,518.30	$2,577.05		$2,941.24		300
	Carteret County General Hospital	14.64	$2,286.62	$156.18		$2,130.44		292
YES	Adventhealth Hendersonville	1.62	$2,321.06	$1,432.87	$935.66	$1,385.39	2.5	274
YES	Atrium Health Lincoln	5.37	$1,452.57	$270.71	$176.77	$1,275.80	8.2	263
YES	Scotland Memorial Hospital	5.31	$668.84	$125.85	$82.18	$586.66	8.1	233
	Chowan Hospital Inc.	2.50	$3,477.87	$1,392.50		$2,085.38		169
YES	Wakemed Raleigh Campus	1.38	$895.86	$650.94	$425.06	$470.79	2.1	139
YES	Wrmc Hospital Operating Corporation	3.22	$196.95	$61.19	$39.96	$156.99	4.9	139
YES	Rowan Regional Hospital	2.55	$1,377.23	$540.73	$353.10	$1,024.13	3.9	127
	Randolph Hospital	2.36	$21,143.81	$8,943.88		$12,199.93		120
	Vidant Beaufort Hospital	3.34	$2,136.18	$639.02		$1,497.16		117
	Catawba Valley Medical Center	1.48	$2,047.32	$1,386.65		$660.67		114
YES	Atrium Health Union	7.16	$1,524.32	$212.80	$138.96	$1,385.36	11.0	107

Hospital Average Markups on Oncology Drugs Billed to the North Carolina State Health Plan

CPT Code	340B: Y/N	Ratio Commercial-ASP	Allowed Amount	ASP	Medicare	340B Acquisition Cost	340B Price Ratio	Profit Spread	Number of Claims
J9035 Bevacizumab (Avastin)	Yes	1.9	$7,741.99	$3,991.60	$4,231.10	$2,606.52	3.0	$5,135.47	296
J9144 Daratumumab	Yes	1.8	$14,978.95	$8,297.04	$8,794.87	$5,417.97	2.8	$9,560.98	748
J9271 Pembrolizumab	Yes	1.8	$21,512.18	$12,090.32	$12,815.74	$7,894.981	2.7	$21,512.18	1,545
J9299 Nivolumab	Yes	1.8	$16,735.87	$9,176.33	$9,726.91	$5,992.15	2.8	$10,743.72	894
J9306 Pertuzumab	Yes	1.9	$11,316.94	$6,109.52	$6,476.10	$3,989.52	2.8	$7,327.42	1,590
J9355 Trastuzumab	Yes	2.3	$9,530.92	$4,150.82	$4,399.87	$2,710.49	3.5	$6,820.43	1,039
J9035 Bevacizumab (Avastin)	No	1.7	$4,002.84	$2,318.25	$2,457.35			$1,684.59	229
J9144 Daratumumab	No	2.4	$19,809.99	$8,324.79	$8,824.28			$11,485.20	152
J9271 Pembrolizumab	No	1.9	$24,298.93	$12,563.20	$13,316.99			$11,735.73	528
J9299 Nivolumab	No	2.3	$26,005.68	$11,224.85	$11,898.34			$14,780.83	230
J9306 Pertuzumab	No	2.4	$14,761.20	$6,047.10	$6,409.93			$8,714.10	628
J9355 Trastuzumab	No	3.7	$9,218.52	$2,520.80	$2,672.05			$6,697.72	479

North Carolina Hospitals' Net Profit Margins, Net Charity Care Spending, and Atrium Health's 340B Cost Savings

Atrium Health Audited Financial Statements, Medicare Cost Report Data in the Hospital Cost Tool developed by the National Academy for State Health Policy

	2008	2009	2010	2011	2018	2019	2020
Atrium Health 340B Cost Savings	$12,970,123	$16,697,500	$16,910,956	$21,065,620	$211,000,000	$230,000,000	$252,000,000
Atrium Health Charity Care Spending					$160,375,000	$265,694,000	$260,909,000

Average Net Profit Margins	340B Hospitals	Non-340B Hospitals
2011	2.5%	2.3%
2012	5.4%	5.0%
2013	5.4%	4.4%
2014	3.9%	0.1%
2015	7.0%	4.3%
2016	8.8%	4.9%
2017	10.5%	5.4%
2018	10%	2.1%
2019	9.7%	5.4%
2020	12.3%	5.0%
2021	15.5%	9.4%

Average Net Charity Care Cost as % of Operating Expenses	340B Hospitals	Non-340B Hospitals
2011	2.8%	1.9%
2012	2.9%	2.5%
2013	3.4%	2.7%
2014	3.8%	3.6%
2015	3.9%	3.6%
2016	4.2%	2.9%
2017	3.4%	2.8%
2018	4.3%	3.5%
2019	4.1%	3.2%
2020	4.1%	4.2%
2021	3.5%	3.7%

The Demographics of Neighborhoods Served by 340B Hospitals' Contracts with External Pharmacies

U.S. Health Resources and Services Administration's 340B Office of Pharmacy Affairs Information System, U.S. Census Bureau's American Community Survey

Child Sites	Average of ACS_ PCT_WHITE_ZC	Average of ACS_ PCT_BLACK_ZC	Average of ACS_ PCT_ASIAN_ZC	Average of ACS_ PCT_HISPANIC_ZC
2011	69.0	23.9	1.6	6.9
2012	70.4	21.6	2.0	9.0
2013	72.9	19.3	2.5	8.3
2014	72.6	19.3	2.5	8.3
2015	73.4	18.3	2.8	7.8
2016	73.2	18.5	2.9	7.6
2017	73.7	18.4	2.7	7.8
2018	73.5	18.4	2.7	7.8
2019	73.3	18.5	2.8	7.9
2020	72.4	18.2	2.9	8.7
Contract Pharmacies	**Average of ACS_ PCT_WHITE_ZC**	**Average of ACS_ PCT_BLACK_ZC**	**Average of ACS_ PCT_ASIAN_ZC**	**Average of ACS_ PCT_HISPANIC_ZC**
2010	60.6	31.4	1.9	6.8
2011	64.1	28.4	2.1	5.9
2012	65.3	27.1	2.2	6.6
2013	70.6	21.8	2.3	7.7
2014	71.8	20.0	2.5	7.9
2015	71.4	18.1	2.9	9.1
2016	71.7	17.9	3.6	9.9
2017	72.3	16.7	4.1	10.7
2018	70.3	18.5	4.3	11.1
2019	67.0	20.0	4.8	11.1

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Uninsured Rate	2013	2014	2015	2016	2017	2018	2019	2020
340B Hospitals' Child Sites	14.8%	14.1%	12.7%	11.5%	10.7%	9.8%	9.4%	9.4%
340B Hospitals' Contract Pharmacies	17.4%	16.0%	14.3%	12.8%	11.2%	9.9%	9.6%	9.5%

Year	340B Child Sites' Inflation Adjusted Median Household Income	340B Contract Pharmacies Inflation Adjusted Median Household Income
2011	$58,322.19	$60,077.87
2012	$62,004.54	$53,856.80
2013	$64,203.92	$55,033.04
2014	$63,955.74	$56,439.63
2015	$66,001.58	$61,136.63
2016	$67,898.69	$61,671.55
2017	$67,452.23	$68,058.58
2018	$68,721.08	$71,324.44
2019	$71,526.76	$72,365.56
2020	$77,141.15	$76,194.35

The Demographics of Neighborhoods Served by 340B Hospitals' Contracts with External Pharmacies

U.S. Health Resources and Services Administration's 340B Office of Pharmacy Affairs Information System, U.S. Census Bureau's American Community Survey

Year	Average of ACS_PCT_HH_INC_$10,000_ZC	Average of ACS_PCT_HH_INC_$14,999_ZC	Average of ACS_PCT_HH_INC_$24,999_ZC	Average of ACS_PCT_HH_INC_$49,999_ZC	Average of ACS_PCT_HH_INC_$99,999_ZC	Average of ACS_PCT_HH_INC_$100,000_ZC
2011	10.6%	7.6%	13.5%	26.6%	26.4%	15.3%
2012	9.1%	6.5%	12.8%	26.8%	27.9%	16.9%
2013	9.0%	6.4%	12.5%	26.2%	27.4%	18.4%
2014	8.9%	6.5%	12.3%	26.5%	27.5%	18.4%
2015	8.7%	6.5%	12.1%	25.8%	27.0%	20.0%
2016	8.2%	6.2%	11.5%	25.3%	28.1%	20.7%
2017	7.5%	5.8%	10.8%	24.9%	28.8%	22.2%
2018	7.0%	5.4%	10.2%	24.2%	29.2%	24.1%
2019	6.7%	4.9%	9.9%	23.2%	29.6%	25.7%
2020	6.3%	4.5%	9.1%	22.2%	30.0%	28.0%